



## **Office of Renewable Energy Programs**

# **OCS Scientific Committee Meeting May 22, 2013**

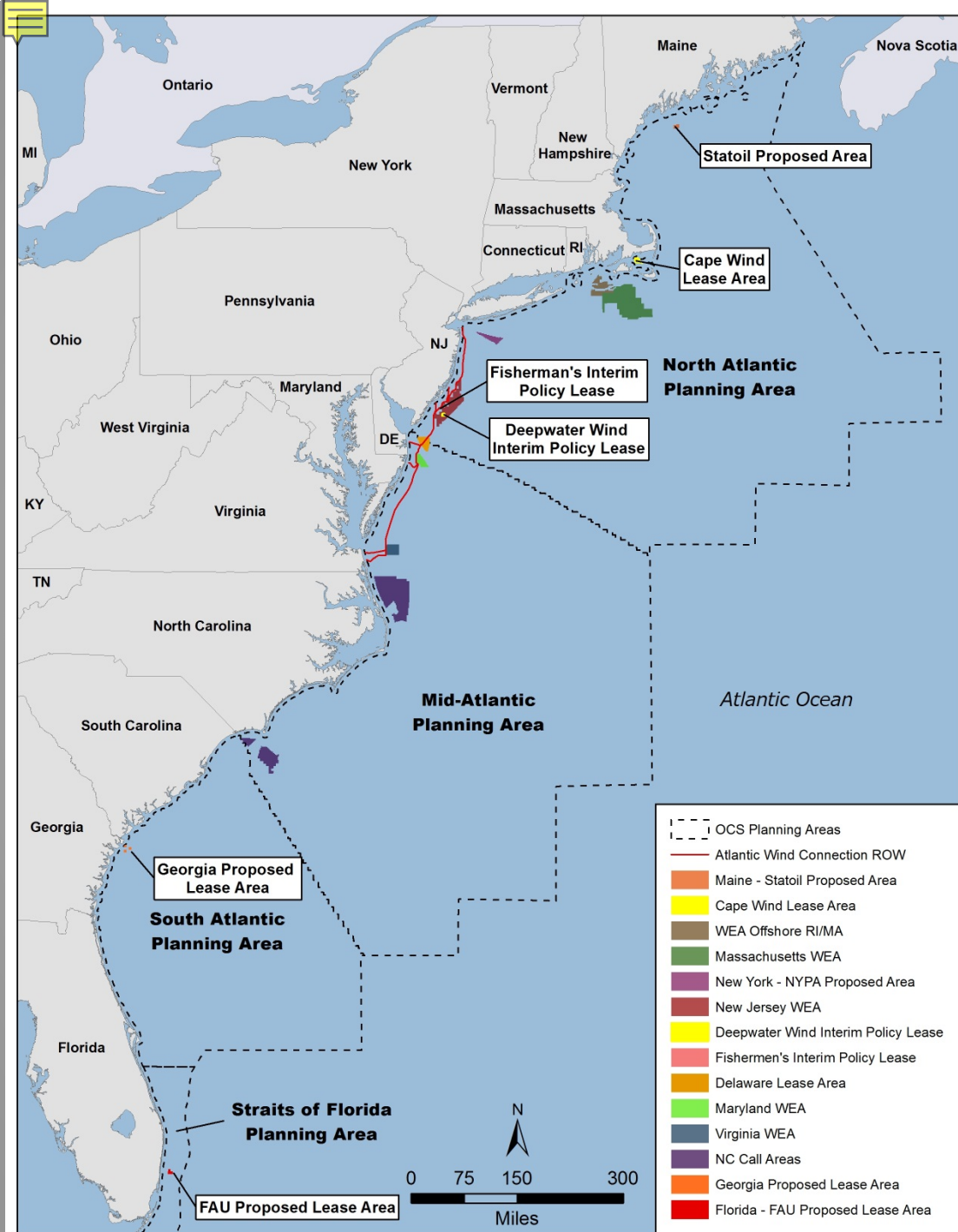
**Mary C. Boatman, Ph.D.  
Environmental Studies Chief**



## Wind Energy

## Marine Hydrokinetic (Ocean Current)





## Wind Energy Areas:

Massachusetts  
 Rhode Island\*  
 New Jersey  
 Delaware\*  
 Maryland  
 Virginia  
 North Carolina\*

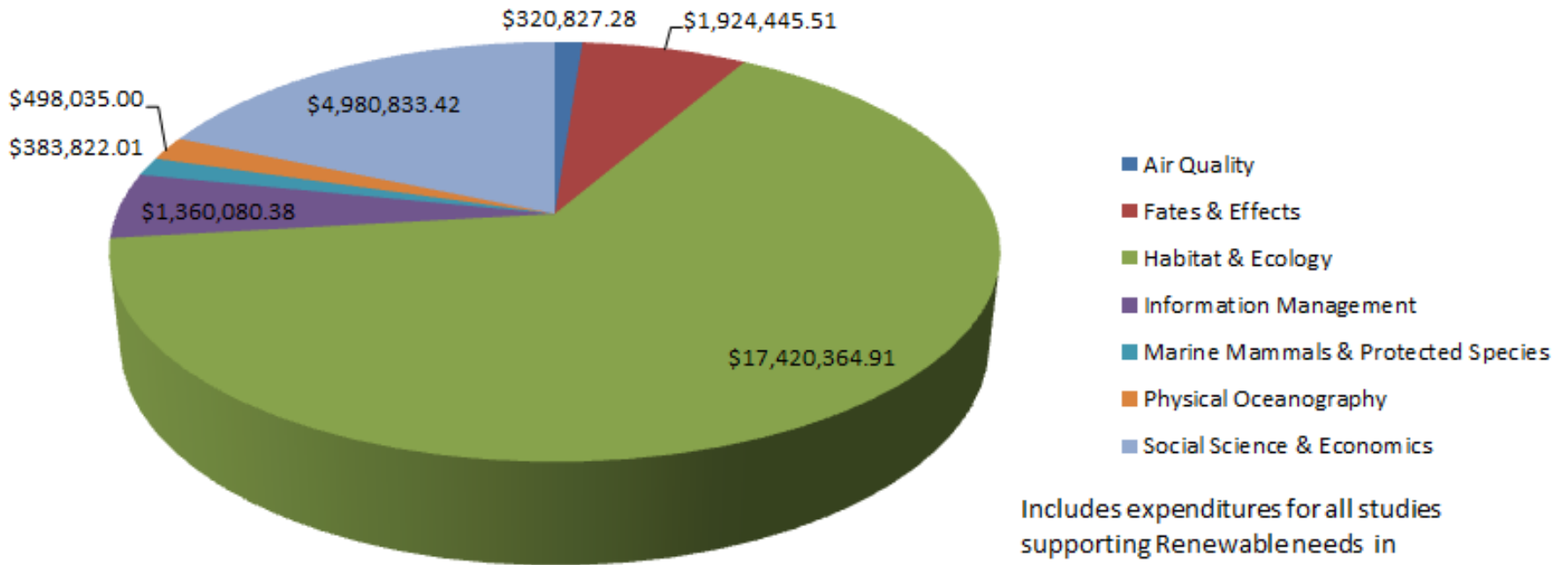
## Interim Policy Leases:

New Jersey  
 Georgia\*  
 Florida\*

## Specific Projects:

Cape Wind  
 Statoil\*  
 Atlantic Wind Connection\*

## Renewable Funds by Discipline FY 2008-2013 Cumulative



Includes expenditures for all studies supporting Renewable needs in whole or in part in the Atlantic.

## Stakeholder Input:

- Task Force Membership ~ 600
- Other Federal Agencies – NOAA, FWS
- Received 30 study ideas
- 14 profiles included in the plan

# Process for Commercial Lease Issuance (30 CFR 585)

## Planning and Analysis

- BOEM engages with the Intergovernmental Task Forces to identify priority Wind Energy Areas (WEAs) offshore. WEAs are locations that appear most suitable for wind energy development
- BOEM prepares an Environmental Assessment for Lease or Grant Issuance and Site Assessment Activities

## Lease or Grant

- BOEM notifies the public and developers of its intent to lease through Sale Notices
- BOEM determines whether Competitive Interest exists
  - If Competitive Interest exists, BOEM holds a lease or grant auction*
  - If Competitive Interest does not Exist, BOEM negotiates a lease*

## Site Assessment

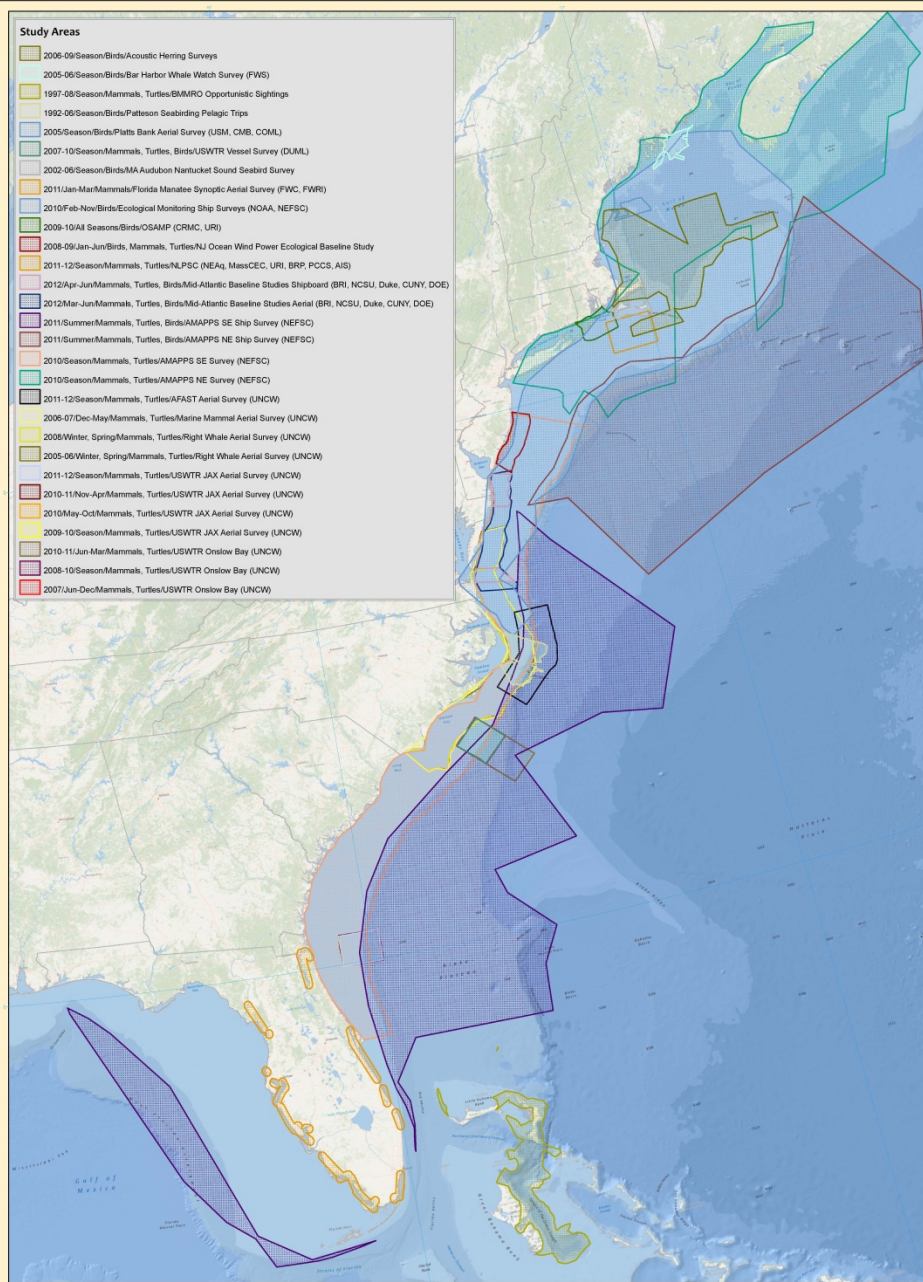
- Lessee conducts site characterization studies
- Lessee submits Site Assessment Plan (SAP)
- BOEM conducts environmental and technical reviews of SAP, eventually deciding to approve, approve with modification, or disapprove the SAP
- If approved, Lessee assesses site (usually with meteorological tower(s) and/or buoy(s))

## Construction and Operations

- Lessee may conduct additional site characterization
- Lessee submits Construction and Operations Plan (COP)
- BOEM conducts environmental and technical reviews of COP, eventually deciding to approve, approve with modification, or disapprove the COP
- If approved, Lessee builds wind farm

Collecting baseline information about the distribution of species.

- Marine Mammals/Sea Turtles
- Birds
- Fish



# Surveys Since 2005

**Aerial and Boat Surveys**

**Birds  
Marine Mammals  
Sea Turtles**

**Variable Densities**

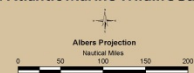
**Variable Techniques**

**Available on Marine Cadastre**

This map depicts study areas of wildlife surveys conducted in the Mid-Atlantic region since 2005. The study areas are comprised of aerial and shipboard surveys. This map is intended to be used as a working compendium to inform the diverse number of groups that conduct surveys in the Mid-Atlantic region.

The study areas shown on this map have been derived from source tracklines and transects. The areas have been simplified due to the large size of the Mid-Atlantic region and the limited ability to map all areas simultaneously. The areas are to be used as a general reference and should not be considered authoritative.

**Mid-Atlantic Marine Wildlife Surveys**



Map Draft Date: October 17, 2012

Basemap Sources: GEBCO, NOAA, CHS, OSU,

USHR, CSURB, National Geographic, DeLorme,

NAVTEQ, Eri and U.S. Census Bureau

<http://services.arcgisonline.com/ArcGIS/rest/services/Ocean/MapServer>

Map © 2012 ESRI



Collecting baseline information about:

- Tourism and Recreation\*
- Historical Properties\*
- Archaeological Sites\*

\* - Completed studies

- What are the positive effects from development?
- What are the impact producing activities?
- How can we best measure these effects?
- What effects will wind turbines have on the local environment?

- Department of Energy
- NOAA
- FWS
- States – RI, MA, NC, VA

***Offshore Wind Energy Development Site Assessment and Characterization:  
Evaluation of the Current Status and European Experience***

- Focus: Birds, Benthic Habitats, Archaeology
- Invited 15 European Experts
- Roundtable discussions of key issues
- Report due July, 2013

- Spatial scales for data collection
- Consistent data collection
- Decision support tools

[www.boem.gov/Renewable-Energy-Program](http://www.boem.gov/Renewable-Energy-Program)